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#3219

TRAIL (C92B9) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, W-S, IP, IHC-P, IF-IC, FC-FP, FC-L	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 28-30	Source/Isotype: Rabbit IgG	UniProt ID: #P50591	Entrez-Gene Id: 8743
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Product Usage Information

Application

Western Blotting
Simple Western™
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)
Flow Cytometry (Live)

Dilution

1:1000
1:10 - 1:50
1:50
1:800
1:400
1:50
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #48318.

Specificity/Sensitivity

TRAIL (C92B9) Rabbit mAb detects endogenous levels of total human TRAIL protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys60 of human TRAIL, within the extracellular region of the protein.

Background

Tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL), also referred to as Apo2 ligand, first identified based on its sequence homology to TNF and Fas/Apo ligand is a member of the TNF family of cytokines and either exists as a type II membrane or soluble protein (1,2). TRAIL induces apoptosis in a variety of transformed cell lines and plays a role in anti-tumor and anti-viral immune surveillance (3). TRAIL signals via binding with death receptors DR4 (TRAIL-R1) (4) and DR5 (TRAIL-R2) (5-8) which can trigger apoptosis as well as NF-κB activation (7,9). Death domains on these receptors leads to the recruitment of a death-induced signaling complex (DISC) leading to caspase-8 and subsequent caspase-3 activation. In addition, TRAIL binds with decoy receptors DcR1 (TRAIL-R3) (6,8,10,11) and DcR2 (TRAIL-R4, TRUNDD) (12,13) which lack the functional cytoplasmic death domain antagonizing TRAIL-induced apoptosis. Osteoprotegerin (OPG) has also been identified as receptor capable of inhibiting TRAIL-induced apoptosis (14). The selectivity of soluble TRAIL at triggering apoptosis in transformed cells as compared to normal cells has led to its investigation as a potential cancer therapeutic (15,16).

Background References

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4. Pan, G. et al. (1997) *Science* 276, 111-3.
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7. Chaudhary, P.M. et al. (1997) *Immunity* 7, 821-30.
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11. Degli-Esposti, M.A. et al. (1997) *J Exp Med* 186, 1165-70.
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13. Marsters, S.A. et al. (1997) *Curr Biol* 7, 1003-6.
14. Kelley, S.K. et al. (2001) *J Pharmacol Exp Ther* 299, 31-8.
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16. Ashkenazi, A. et al. (1999) *J Clin Invest* 104, 155-62.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized) **FC-L:** Flow Cytometry (Live)

Cross-Reactivity Key

H: Human

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